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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

MCALLISTER, S

ART UNIT	PAPER NUMBER
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3652

DATE MAILED:

08/14/00

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/170,225**

Applicant(s)  
**Sawa et al**

Examiner  
**Steven B. McAllister**

Group Art Unit  
**3652**



- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

- ☒ Claim(s) 1-8 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-8 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3652

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: the language regarding the percentage by weight of particles in the belt or layer is unclear.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2-4 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 recites that 10 to 70% of the particles are contained in the elastic material of the belt. However, the disclosure shows all particles contained in the elastic material. The disclosure does not enable one of ordinary skill in the art to make the invention as claimed, using only 10 to 70% of the particles.

Art Unit: 3652

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 5 are unclear because it recites particles projecting from the surface of a base material because of the elasticity of the elasticity of that material, but particles cast or formed in any material, elastic are rigid can project from the surface of that material. Also, the claim is unclear because of the recitation of a varying projection due to the shape or hardness of the conveyed member. It is recommended to amend the claim to clarify that elasticity of the material affects the ability of the particle to vary its projection, not simply that it allows for projection. It is also recommended to clarify that the projection varies with force, not shape or hardness, per se.

Claims 2 and 6 are unclear because of the use of "weight %". It is recommended to rephrase as "percent by weight".

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamoto.

Art Unit: 3652

Kawamoto shows a belt with high hardness particles L projecting from the surface of an elastic material 6 comprising (col. 2, line 41). It is inherent that under various load conditions (caused for instance by conveyed materials of different shapes or hardnesses) the particles will project various amounts due to the resiliency of the rubber.

As to claim 5, it is noted that there is a resilient rubber layer between the substrate 5 and the high hardness containing layer (see Fig. 4e, for example).

As to claim 8, it is noted that a filament is disposed on the driving surface side in the substrate 5 (col. 2, lines 28-38).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold in view of Saylor, Jr.

Arnold shows a belt with an elastic base layer 82, 84 on top and bottom, the layer having a hardness of between 15 and 90 (col. 10, lines 10-20). It does not show a particle containing layer, the layer 10-70% of its weight composed of 3-300 micrometer particles. Saylor, Jr. shows a layer 16 with 3-300 micrometer sized particles (col. 3, lines 57-61) and comprising 10-70% of the

Art Unit: 3652

weight of the layer (col. 3, line 40 - col. 4, line 30). It would have been obvious to one of ordinary skill in the art to modify one of the elastic layers of Arnold by adding the particles as taught by Saylor, Jr. in order to provide enhanced friction on the belt.


As to claim 7, it is noted that Arnold discloses a filament in the central portion of the belt (see Fig. 8B).

As to claim 8, Arnold in view of Saylor, Jr. disclose all elements of the claim except the filament disposed on the driving surface. However, it would have been an obvious matter of design choice to place the filament on the driving surface side since it does not appear that the specific placement solves any specific problem or is for any particular reason and it appears that the belt would perform equally well with the filaments located in either location.


***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.

  
Steven B. McAllister

August 10, 2000

  
**ROBERT P. OLSZEWSKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**